



Michigan Professional **FIRE FIGHTERS UNION**

Paul Hufnagel
President

1651 Kingsway Ct., Ste. E, Trenton, MI 48183
1.800.886.7338 fax 1.800.454.1757

Terrence H. Chesney
Secretary-Treasurer

www.mpffu.org

Testimony of Paul Hufnagel, President of the Michigan Professional Fire Fighters Union Speaking in Support of HB 4401 & SB 102

My name is Paul Hufnagel and I am president of the Michigan Professional Fire Fighters Union representing over 5000 professional fire fighters and their families in Michigan. I am here today to speak in support of HB 4401 and SB 102, which are critically important to Michigan's firefighters and their families.

Fire Fighters are the first responders to all types of emergency situations that occur in communities all across Michigan every day. We respond to and mitigate emergencies ranging from residential and commercial fires, hazardous materials emergencies, medical emergencies, and almost any other type of emergency situation that may arise.

Many times this brings us face to face with unknown exposures – often occurring in uncontrolled, dangerous environments – to toxic chemicals, fumes, and smoke which are a routine part of many emergency operations.

Because of these exposures, there is a need to recognize the increased risk of cancer is a very real part of our jobs. Many studies over the years recognize that fire fighters are at a higher risk level for cancer than other workers.

The testimony presented today will provide a history of studies performed on firefighters and their exposure to chemicals during emergency operations.

The purpose of HB 4401 and SB 102 is to amend the Workers Compensation Act. It will add seven (7) cancers – as a third element to the already existing heart and lung presumption – that sufficient scientific evidence has connected to firefighter exposures while performing their jobs.

Medicine, my professional organization.

I am here today at the request of the International Association of Fire Fighters (IAFF) on behalf of the Michigan Professional Fire Fighters Union. I am delighted to have this opportunity to discuss the scientific and medical reasons to support presumptive legislation for fire fighters.

This afternoon I will discuss three related topics:

- the increased cancer risk that fire fighters face and how their occupational exposure to a wide range of cancer-causing chemicals contributes to this elevated cancer risk;
- the research challenges that commonly lead to an underestimate of fire fighter cancer risk in most studies, and;
- I will conclude with a discussion of how the proposed change in workers' compensation to address specific cancers can make a dramatic difference in the lives of fire fighters who develop an occupationally related cancer.

I would like to start by briefly telling you about the IAFF and my involvement with this organization. The IAFF is an international union that is affiliated with the AFL-CIO and the Canadian Labour Congress and currently represents over 280,000 paid professional fire service employees in the United States and Canada. The IAFF has been actively involved in improving the health and safety of fire fighters for more than fifty years. Each year they conduct an annual *Death and Injury Survey* with the participation of various fire department administrators. This survey has shown that fire fighting is among the most hazardous occupations in the United States. During the ten year period, 1990-1999, the annual *Death and Injury Survey* found that professional fire fighters experienced 342 line-of-duty deaths, over 500 occupational disease deaths, 349,509 injuries, and 6,577 forced retirements due to occupationally induced diseases or injuries. Fire fighter line-of-duty fatalities indicate that fire fighting risk levels are similar to other publicized hazardous occupations in the private sector, including mining and construction. I have been involved with the IAFF since 1999 when I rotated through their Health and Safety Department as a resident in the Johns Hopkins Occupational Medicine Residency. Since then I



Testimony of
Michael J. Levine, MD, MPH
Occupational and Environmental Physician
Williamsburg, VA
On behalf of
The Michigan Professional Fire Fighters Union
April 17, 2007

Good afternoon, my name is Dr. Michael Levine. I am an Occupational Physician practicing in Eastern Virginia. I have completed residencies in Internal Medicine and Occupational and Environmental Medicine, and I am board certified in both specialties. I have worked exclusively in the field of Occupational Medicine since completing my fellowship at the Johns Hopkins University Bloomberg School of Public Health in 2000. Occupational Medicine is a branch of Preventive Medicine. While Occupational Physicians do care for individual patients, we are also responsible for care of entire populations of workers.

Public Safety Medicine is a particular professional interest of mine. At the present time I serve as Medical Director to two municipal fire departments and one Federal department. I have done work, on occasion, for three other Fire departments in Virginia. I am also a member of the Public Safety Medicine work group of the American College of Occupational and Environmental

Adding cancer would simply make it an occupationally related disability, unless there was evidence to the contrary.

Twenty-Three (23) States have adopted Cancer Presumptive legislation protecting firefighters and their families.

We are not here to say that we are the only group at risk. But we do know that our occupation continually takes us into situations of high exposure to toxic substances. And when we deal with these toxic substances, it is under extremely volatile and hazardous conditions.

Thankfully, this bill before you today will not impact a large number of cases in Michigan. Many fire fighters are already covered by disability pensions. This bill will only affect fire fighters who are not covered by disability pensions or are denied coverage by their pension system.

As to the financial impact on the workers compensation system, it will be miniscule as demonstrated by over thirty-five years of experience with the Heart and Lung Presumption for firefighters and police officers that is in the current law.

There is no documentation that costs of the Heart and Lung Presumption provisions of the Workers Comp Act have increased premiums for communities.

We fully understand that we are in a dangerous business. But we also know that firefighters are exposed to chemical-induced cancers while performing their duties.

All we are asking for, in those few cases where nothing is offered, is that the workers compensation act becomes the last refuge for disabled fire fighters and their families.

Past legislatures, which adopted current heart and lung presumption provisions, also understood that we are in a unique and dangerous business.

That's why we ask for your support in voting for this legislation which provides another level of protection for fire fighters and their families.

have regularly worked with IAFF Locals, as well as the administrators of their respective departments.

Occupational Exposures of Fire Fighters

In the vast majority of US workplaces, occupational exposure levels have greatly declined in the past 2-3 decades. Improved workplace conditions can be attributed to many factors including governmental occupational safety and health agencies, legislation, union efforts, training programs for occupational health professionals, and good business practice including the need to keep highly skilled workers healthy and at work and to conserve raw materials.

Unfortunately, however, fire fighters have not benefited from this overall improvement. They are still entering uncontrolled, hazardous environments regularly. Extensive study of the exposures fire fighters commonly encounter during fire suppression and overhaul activities has clearly documented reason for concern about these exposures. Occupational health experts rely on the International Agency for Research on Cancer (IARC) to categorize chemicals for their potential to cause cancer in humans. Studies have revealed that fire fighters are commonly exposed to numerous agents that IARC considers Group 1 which are known to cause cancer in humans. Examples include asbestos, benzene, benzo[a]pyrene, formaldehyde, and soot, the exposure that causes cancer in chimney sweeps. Fire fighters are also exposed to Group 2A probable human carcinogens such as 1, 3-butadiene and diesel engine exhaust. In fact, IARC recently added high level exposure to combustion products of wood in this category which has clear implications for fire fighters. In addition, thousands of new synthetic chemicals are produced annually, making it impossible to study the toxic properties of each one, let alone the toxic properties of their combustion products. A Harvard study that examined levels of a number of air contaminants at more than 200 structural fires provides an excellent example of the uncontrolled, hazardous nature of fire fighter exposures. In that study, the carcinogen, benzene was detected in 92% of samples; half were over 1 part per million (ppm), which is the current Occupational Safety and Health Administration (OSHA) permissible exposure level. Approximately 5% of the samples were above 10 ppm benzene.

Further adding to the risk is the fact that the only available form of protection for fire fighters is personal protective equipment such as respirators and turn-out gear. This equipment is also the least effective of the established workplace controls for exposure reduction. Personal protective equipment is last in what we call the hierarchy of controls, far inferior to such remedies as substitution with a safer chemical, enclosure of the hazard, and ventilation. Why is this? Because this equipment does not completely eliminate exposure and if exposure is high, as commonly occurs in fire fighting, worker exposures, even with use of such equipment, will be as well. Again, using benzene as an example, Anodic, and colleagues at the National Institute for Occupational Safety and Health (NIOSH - the research institute for OSHA) studied benzene and other exposures at 22 fires. Samples were collected via probes placed inside and outside the masks of working fire fighters. Surprisingly, the levels of benzene inside the mask ranged as high as 21 ppm.

Reasons for Underestimation of Fire Fighter Cancer Risk in Existing Research

Given the uncontrolled exposures to carcinogens that fire fighters regularly encounter, studies to examine the risk for cancer outcomes in firefighters have been conducted. Statistically significant elevations in various cancer outcomes have been reported in different studies using a range of research approaches. The results of many such studies have been summarized in the meta-analysis of Leasers and colleagues. These authors concluded that fire fighters had a “probable cancer risk” for four cancers and a possible risk for 8 others. Does this mean that only four cancers are really due to occupation in fire fighters? If the exposures are so high and poorly controlled, why aren’t all the studies consistent in showing greatly increased cancer rates? The answer is that there are several major challenges in accurately studying risk in fire fighters and ALL result in underestimation of risk.

The first challenge is exposure assessment. In controlled manufacturing settings, air monitoring is performed to calculate routine exposures. There is no way to do that for fire fighters. As a result, many studies simply list exposure as yes or no based on

occupation as a fire fighter. In an effort to better estimate actual carcinogen dose, some studies use years spent as a fire fighter. However, do exposures encountered during 20 years as a fire fighter in a quiet residential area result in the same cancer risk as 20 years in an urban industrial fire station? Probably not. What about number of runs? Again, combustion products in fires differ and fires involving industrial settings and/or synthetic products are likely to entail higher carcinogen exposures. What is the effect of this “misclassification” where high risk fire fighters may end up classified in the low risk group and/or the risk group is diluted by fire fighters with less true carcinogen exposure? Underestimation of true risk. This makes it appear that fire fighters are not at risk for cancer.

The next challenge is the healthy worker effect. In order to perform the physically demanding work involved in fire fighting, workers must enter the workforce very fit and continue to exercise and watch their diet to control weight and maintain physical ability in their fire fighting careers. This is evident in the LeMasters study, in which, overall, fire fighters have a 10% less risk of dying at a given age than the rest of us. How does the overall good health of fire fighters affect the outcome of cancer research in this workforce? Again, the risk is underestimated because their risk starts out below the general population to which they are compared. As a result, when a study finds firefighters to have *any* increase in cancer rates relative to the general population it is unsettling. Police officer comparisons are likely to be better at avoiding the healthy worker bias, yet due to the number of studies that did not do this comparison, Le Masters and colleagues did not restrict their meta-analysis only to studies with a healthy workforce comparison.

The small numbers of fire fighters affected by individual cancers decreases the ability to achieve statistical significance of associations. Meta-analyses, in which data from small studies are combined, can help with this and in fact, in Table 5 of the LeMasters’ paper, when they did this, 10 of the 20 cancers examined were significantly increased. This is truly striking since the studies were not selected based on overall quality such as the most accurate comparison group or exposure/dose assessment. Thus, statistically significant

results from studies with stronger designs may be diluted by averaging with less well designed studies which would reduce the final summary estimate.

Overall, given the challenges in this body of research, the likelihood is strongly AGAINST observing risk in firefighters. Thus, it is clear that fire fighters are at risk for many cancers not just the four listed as “probable” by LeMasters and co-workers.

Impact of Worker’s Compensation for Fire Fighters Who Develop Occupationally Related Cancer

Despite these hazards, as public servants, fire fighters willingly take on the burden of danger for all of us. **Yet when they are diagnosed with cancer as a result of their job, they face a system that is stacked against them.** Under the current system in Michigan, some municipalities could require that fire fighters prove the exact exposure that caused their cancer. This is clearly impossible. In addition, cancer diagnosis and treatment can be an arduous, protracted process which can take many months or longer when surgery, chemotherapy, or radiation is needed. When these occupationally-induced cancers are not covered by workers compensation, fire fighters must use up precious leave time and may have to use personal savings in order to cover medical costs after the insurance maximum is met. It’s true that whether it’s health insurance or workers compensation, someone in the system has to pay the costs. But these **additional burdens should not be placed on fire fighters when they develop cancers that studies have shown are clearly a result of their occupation.** Experience in other states has shown that the number of cancer claims per year is low and would not significantly affect workers compensation costs. Another important point is that presumption of cancer is rebuttable and fire fighters can still be denied worker’s compensation if they have non-occupational risk factors that outweigh their occupation.

Presumption of cancer in fire fighters is finally becoming accepted throughout the country. Twenty-three states have passed presumptive cancer legislation and 5-6 other states are currently considering such legislation. The IAFF receives reports regularly

from members indicating that worker's compensation boards are increasingly recognizing cancer in fire fighters as employment related.

In Summary:

There is ample data documenting that fire fighters are exposed to carcinogens in their work environment. We also know that personal protective equipment used by fire fighters is not 100% effective. Data also clearly show that fire fighters are at increased risk of developing and dying from cancer.

Presumption of cancer in fire fighters is becoming accepted throughout the country. Currently, 23 states in the United States have legislation now in effect that presumes that if a fire fighter develops cancer it is occupationally induced and 5-6 other states are currently considering such legislation.

It is time that Michigan joins other states throughout the country and enacts legislation to clearly reflect that cancer is occupationally related to fire fighting.

Thank you for your time and consideration.

*House Bill 4401 Senate 102
Cancer Presumption Legislation Testimony
Michael Forster, Administrator,
Michigan Municipal League Workers' Compensation Fund
April 17, 2007*

My name is Michael Forster; I am the Administrator of the Michigan Municipal League Workers' Compensation Group Insurance Fund. We provide workers compensation coverage to almost 900 public entities in the State, approximately 165 of which have full time fire departments. In addition to our cooperative program, local governments in Michigan also provide workers compensation benefits to their employees through various self insurance mechanisms and commercial insurance.

The Michigan Municipal League Workers' Compensation Fund has historically avoided taking positions on legislation involving benefit levels since we see our mission as one of service to both our member communities *and* to the injured employees we protect. But in this case, to be consistent with that philosophy of service to both, I am here to voice our opposition to the cancer presumption legislation before you.

There is no doubt that the proposed legislation will increase workers compensation premiums dramatically, while duplicating benefits that are already paid for, and with no corresponding benefit to fire fighters. More importantly, however, it is our position that the legislation would harm, rather than assist, fire fighters at a time when they are in greatest need.

First, medical care for fire fighters will be compromised.

Because of the nature of the disease, placing cancer patients into the workers' compensation system will result in compromised care. Insurers will dispute treatments that might be considered novel, experimental, new or more frequent than expected. Because of lower reimbursements and billing disputes, some medical service providers will be less likely to accept these employees as patients. Indirect health conditions resulting from or aggravated by – for example – a compromised immune system will lead to payment disputes. When a fire fighter with cancer gets pneumonia, is it cancer related? Unlike health insurers, which pay for any health related problems, many workers compensation carriers won't pay for treatment on a voluntary basis that isn't directly related to the cancer. Health insurers may not voluntarily step in and pay for gaps in care while disputes are ongoing. Most or all cancer presumption cases will force the afflicted employees to hire legal counsel.

The legislation will not ensure payment of lost wage benefits.

Workers compensation carriers often dispute an employee's assertion that he or she is no longer able to work, and do so more frequently and aggressively than disability carriers. One of the most common symptoms associated with cancer is fatigue, which routinely comes and goes, and varies in degree. Legal disputes over forcing a fire fighter to continue working will be frequent – and disability carriers are not likely to step in and pay while the dispute is ongoing.

The legislation would compromise fire department budgets because it duplicates benefits already being paid for by local governments, with no corresponding benefit.

Although health and disability insurance costs won't be reduced if this bill is enacted, workers compensation costs will go up significantly. Insurers are required to set aside 100% (without regard to investment income) of the expected lifetime cost of an injured workers wage and medical expenses, along with an actuarially determined additional amount to cover unexpected or unforeseen costs. In addition to wage and medical benefits, the law provides for an additional payment of ten years benefits or more to the dependents of an employee who dies as a result of a work related injury.

Based on our analysis, for each cancer case each year that occurs among the MML members with paid fire departments, their collective premiums could increase 10% to 25%. Because cancer is a leading cause of death and the legislation covers most common cancers, the costs will be enormous.

Conclusion

In sum, we don't believe that the legislation addresses a public policy problem. The scientific connection between fire fighting and cancer is very questionable. If the relationship was backed by solid evidence, then fire fighters would pursue claims with or without a presumption.

The reason that our Fund has never received a claim for work related cancer is that existing benefits in most or all communities in Michigan already protect fire fighters. If there are instances where a fire fighter has not been protected by their current health, disability and pension plans, a far more simple and appropriate solution is for the individual community involved to provide improved benefits. It is not fair to make all communities subsidize what – at most – may be an isolated issue.

The bill is an unfunded mandate to cover a disease that is not occupationally related, will be ruinously expensive, provides no benefit that is not already being paid for by communities, and worst of all – harms the very fire fighters it is intended to protect, by stripping them of access to undisputed payment of health, disability and pension benefits – and throwing them into the workers compensation system at a time when they are most vulnerable.

Thank you very much for considering our position. We would be glad to work with any interested parties to further clarify their concerns and work towards a common understanding. I'd be happy to try and answer any questions you may have.